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		ccg Pro														96
		ggc Gly 35														144
		cgg Arg														192
		acg Thr														240
		aaa Lys														288
aag	ccg	gtt	ctt	gca	att	atc	cag	gca	ggt	gac	gac	aac	ttg	atg	cag	336

Lys	Pro	Val	Leu 100	Ala	Ile	Ile	Gln	Ala 105	Gly	Asp	Asp	Asn	Leu 110	Met	Gln	
gaa Glu	atc Ile	aac Asn 115	cag Gln	aat Asn	ttg Leu	gct Ala	gag Glu 120	gag Glu	gct Ala	ggt Gly	ctg Leu	aac Asn 125	atc Ile	act Thr	cac His	384
att Ile	tgc Cys 130	ctc Leu	cct Pro	cca Pro	gat Asp	agc Ser 135	agt Ser	gaa Glu	gcc Ala	gag Glu	att Ile 140	ata Ile	gat Asp	gaa Glu	atc Ile	432
tta Leu 145	Lys	atc Ile	aat Asn	gaa Glu	gat Asp 150	acc Thr	aga Arg	gta Val	cat His	ggc Gly 155	ctt Leu	gcc Ala	ctt Leu	cag Gln	atc Ile 160	480
tct Ser	gag Glu	aac Asn	ttg Leu	ttt Phe 165	agc Ser	aac Asn	aaa Lys	gtc Val	ctc Leu 170	aat Asn	gcc Ala	ttg Leu	aaa Lys	cca Pro 175	gaa Glu	528
aaa Lys	gat Asp	gtg Val	gat Asp 180	gga Gly	gta Val	aca Thr	gac Asp	ata Ile 185	aac Asn	ctg Leu	ggg	aag Lys	ctg Leu 190	gtg Val	cga Arg	576
Gly	gat Asp	gcc Ala 195	cat His	gaa Glu	tgt Cys	ttt Phe	gtt Val 200	tca Ser	cct Pro	gtt Val	gcc Ala	aaa Lys 205	gct Ala	gta Val	att Ile	624
gaa Glu	ctt Leu 210	ctt Leu	gaa Glu	aaa Lys	tca Ser	ggt Gly 215	gtc Val	aac Asn	cta Leu	gat Asp	gga Gly 220	aag Lys	aag Lys	att Ile	ttg Leu	672
gta Val 225	gtg Val	ggg Gly	gcc Ala	cat His	ggg Gly 230	tct Ser	ttg Leu	gaa Glu	gct Ala	gct Ala 235	cta Leu	caa Gln	tgc Cys	ctg Leu	ttc Phe 240	720
cag Gln	aga Arg	aaa Lys	Gly ggg	tcc Ser 245	atg Met	aca Thr	atg Met	agc Ser	atc Ile 250	cag Gln	tgg Trp	aaa Lys	aca Thr	cgc Arg 255	cag Gln	768
ctt Leu	caa Gln	agc Ser	aag Lys 260	ctt Leu	cac His	gag Glu	gct Ala	gac Asp 265	att Ile	gtg Val	gtc Val	cta Leu	ggc Gly 270	tca Ser	cct Pro	816
aag Lys	cca Pro	gaa Glu 275	gag Glu	att Ile	ccc Pro	ctt Leu	act Thr 280	tgg Trp	ata Ile	caa Gln	cca Pro	gga Gly 285	act Thr	act Thr	gtt Val	864
ctc Leu	aac Asn 290	tgc Cys	tcc Ser	cat His	gac Asp	ttc Phe 295	ctg Leu	tca Ser	ggg Gly	aag Lys	gtt Val 300	ggg Gly	tgt Cys	ggc Gly	tct Ser	912
cca Pro 305	ag a Arg	ata Ile	cat His	ttt Phe	ggt Gly 310	gga Gly	ctc Leu	att Ile	gag Glu	gaa Glu 315	gat Asp	gat Asp	gtg Val	att Ile	ctc Leu 320	960
ctt Leu	gct Ala	gca Ala	gct Ala	ctg Leu 325	cga Arg	att Ile	cag Gln	aac Asn	atg Met 330	gtc Val	agt Ser	agt Ser	gga Gly	agg Arg 335	aga Arg	1008
tgg	ctt	cgt	gaa	cag	cag	cac	agg	cgg		aga		cac	tgc	ttg	aaa	1056

Trp	Leu	Arg	Glu 340	Gln	Gln	His	Arg	Arg 345	Trp	Arg	Leu	His	Cys 350	Leu	Lys	
	cag Gln															1104
	act Thr 370															1152
	gat Asp															1200
	gtg Val															1248
	gct Ala															1296
	atc Ile															1344
	gcc Ala 450															1392
gga Gly 465	gga Gly	gcc Ala	gcg Ala	ggt Gly	ggt Gly 470	gga Gly	tat Tyr	gcc Ala	cag Gln	gtc Val 475	atc Ile	ccc Pro	atg Met	gag Glu	gag Glu 480	1440
	aac Asn															1488
	ttg Leu															1536
	aca Thr															1584
	aga Arg 530															1632
	aat Asn															1680
	gcc Ala															1728
ttg	gat	aca	aat	gac	cga	ttt	cta	cga		ata		atc	ggg	cag	gga	1776

Leu	Asp	Thr	Asn 580	Asp	Arg	Phe	Leu	Arg 585	Lys	Ile	Thr	Ile	Gly 590	Gln	Gly	
aac Asn	aca Thr	gag Glu 595	aag Lys	ggc Gly	cat His	tac Tyr	cgg Arg 600	cag Gln	gcg Ala	cag Gln	ttt Phe	gac Asp 605	atc Ile	gca Ala	gtg Val	1824
gcc Ala	agc Ser 610	gag Glu	atc Ile	atg Met	gcg Ala	gtg Val 615	ctg Leu	gcc Ala	ctg Leu	acg Thr	gac Asp 620	agc Ser	ctc Leu	gca Ala	gac Asp	1872
atg Met 625	aag Lys	gca Ala	cgg Arg	ctg Leu	gga Gly 630	agg Arg	atg Met	gtg Val	gtg Val	gcc Ala 635	agt Ser	gac Asp	aaa Lys	agc Ser	ggg Gly 640	1920
												gct Ala				1968
ttg Leu	atg Met	aaa Lys	gat Asp 660	gca Ala	ata Ile	aaa Lys	cca Pro	aac Asn 665	ctg Leu	atg Met	cag Gln	acc Thr	ctg Leu 670	gaa Glu	ggg Gly	2016
aca Thr	cct Pro	gtg Val 675	ttc Phe	gtg Val	cat His	gcg Ala	ggc Gly 680	cct Pro	ttt Phe	gct Ala	aac Asn	att Ile 685	gct Ala	cac His	ggc Gly	2064
aac Asn	tct Ser 690	tca Ser	gtg Val	ttg Leu	gct Ala	gat Asp 695	aaa Lys	att Ile	gcc Ala	ctg Leu	aaa Lys 700	ctg Leu	gtt Val	ggt Gly	gaa Glu	2112
gaa Glu 705	gga Gly	ttt Phe	gta Val	gtg Val	acc Thr 710	gaa Glu	gct Ala	ggc Gly	ttt Phe	ggt Gly 715	gct Ala	gac Asp	atc Ile	gga Gly	atg Met 720	2160
gag Glu	aaa Lys	ttc Phe	ttc Phe	aac Asn 725	atc Ile	aag Lys	tgc Cys	cga Arg	gct Ala 730	tcc Ser	ggc Gly	ttg Leu	gtg Val	ccc Pro 735	aac Asn	2208
gtg Val	gtt Val	gtg Val	tta Leu 740	gtg Val	gca Ala	acg Thr	gtg Val	cga Arg 745	gct Ala	ctg Leu	aag Lys	atg Met	cat His 750	gga Gly	ggc Gly	2256
												gaa Glu 765				2304
												ctc Leu				2352
att Ile 785	cag Gln	atc Ile	act Thr	cag Gln	ctc Leu 790	ttt Phe	ggg ggg	gtt Val	ccc Pro	gtt Val 795	gtg Val	gtg Val	gct Ala	ctg Leu	aat Asn 800	2400
gtc Val	ttc Phe	aag Lys	acc Thr	gac Asp 805	acc Thr	cgc Arg	gct Ala	gag Glu	att Ile 810	gac Asp	ttg Leu	gtg Val	tgt Cys	gag Glu 815	ctt Leu	2448
gca	aag	cgg	gct	ggt	gcc	ttt	gat	gca		ccc 4/10		tat	cac	tgg	tcg	2496

Ala	Lys	Arg	Ala 820	Gly	Ala	Phe	Asp	Ala 825	Val	Pro	Cys	Tyr	His 830	Trp	Ser	
gtt Val	ggt Gly	gga Gly 835	aaa Lys	gga Gly	tcg Ser	gtg Val	gac Asp 840	ttg Leu	gct Ala	cgg Arg	gct Ala	gtg Val 845	aga Arg	gag Glu	gct Ala	2544
gcg Ala	agt Ser 850	aa a Lys	aga Arg	agc Ser	cga Arg	ttc Phe 855	cag Gln	ttc Phe	ctg Leu	tat Tyr	gat Asp 860	gtt Val	cag Gln	gtt Val	cca Pro	2592
att Ile 865	gtg Val	gac Asp	aag Lys	ata Ile	agg Arg 870	acc Thr	att Ile	gct Ala	cag Gln	gct Ala 875	gtc Val	tat Tyr	gga Gly	gcc Ala	aaa Lys 880	2640
gat Asp	att Ile	gaa Glu	ctc Leu	tct Ser 885	cct Pro	gag Glu	gca Ala	caa Gln	gcc Ala 890	aaa Lys	ata Ile	gat Asp	cgt Arg	tac Tyr 895	act Thr	2688
caa Gln	cag Gln	ggt Gly	ttt Phe 900	gga Gly	aat Asn	ttg Le u	ccc Pro	atc Ile 905	tgc Cys	atg Met	gca Ala	aag Lys	acc Thr 910	cac His	ctt Leu	2736
tct Ser	cta Leu	tct Ser 915	cac His	caa Gln	cct Pro	gac Asp	aaa Lys 920	aaa Lys	ggt Gly	gtg Val	cca Pro	agg Arg 925	gac Asp	ttc Phe	atc Ile	2784
tta Leu	cct Pro 930	atc Ile	agt Ser	gac Asp	gtc Val	cgg Arg 935	gcc Ala	agc Ser	ata Ile	ggc Gly	gct Ala 940	ggg Gly	ttc Phe	att Ile	tac Tyr	2832
cct Pro 945	ttg Leu	gtc Val	gga Gly	acg Thr	atg Met 950	agc Ser	acc Thr	atg Met	cca Pro	gga Gly 955	ctg Leu	ccc Pro	acc Thr	cgg Arg	ccc Pro 960	2880
tgc Cys	ttt Phe	tat Tyr	gac Asp	ata Ile 965	gat Asp	ctt Leu	gat Asp	acc Thr	gaa Glu 970	aca Thr	gaa Glu	caa Gln	gtt Val	aaa Lys 975	ggc Gly	2928
ttg Leu																2934

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Met Gly Thr Arg Leu Pro Leu Val Leu Arg Gln Leu Arg Arg Pro Pro 1 $$ 15

Gln Pro Pro Gly Pro Pro Arg Arg Leu Arg Val Pro Cys Arg Ala Ser 20 25 30

Ser Gly Gly Gly Gly Gly Gly Gly Gly Arg Glu Gly Leu Leu Gly (5/10)

GIN	50	Arg	Pro	GIn	Asp	55 55	GIn	Ala	Arg	Ser	Ser 60	Cys	Ser	Pro	G1
Gly 65	Arg	Thr	Pro	Ala	Ala 70	Arg	Asp	Ser	Ile	Val 75	Arg	Glu	Val	Ile	G1: 80
Asn	Ser	Lys	Glu	Val 85	Leu	Ser	Leu	Leu	Gln 90	Glu	Lys	Asn	Pro	Ala 95	Ph
Lys	Pro	Val	Leu 100	Ala	Ile	Ile	Gln	Ala 105	Gly	Asp	Asp	Asn	Leu 110	Met	G1
Glu	Ile	Asn 115	Gln	Asn	Leu	Ala	Glu 120	Glu	Ala	Gly	Leu	Asn 125	Ile	Thr	Hi
	130				Asp	135					140		-		
145					Asp 150					155					16
				165	Ser				170					175	
			180		Val			185					190		
		195			Cys		200					205			
	210				Ser	215					220	_	_		
225					230 Met					235			_		240
				245	His				250			-		255	
	51.11	501	260	200		514	.124	265	.10	741	7 41	Dea	270	261	-10

Lys Pro Glu Glu Ile Pro Leu Thr Trp Ile Gln Pro Gly Thr Thr Val

(6/10)

Leu Asn Cys Ser His Asp Phe Leu Ser Gly Lys Val Gly Cys Gly Ser 290 295 Pro Arg Ile His Phe Gly Gly Leu Ile Glu Glu Asp Asp Val Ile Leu 310 315 Leu Ala Ala Leu Arg Ile Gln Asn Met Val Ser Ser Gly Arg Arg 325 330 Trp Leu Arg Glu Gln Gln His Arg Arg Trp Arg Leu His Cys Leu Lys 345 Leu Gln Pro Leu Ser Pro Val Pro Ser Asp Ile Glu Ile Ser Arg Gly 360 365 Gln Thr Pro Lys Ala Val Asp Val Leu Ala Lys Glu Ile Gly Leu Leu 375 Ala Asp Glu Ile Glu Ile Tyr Gly Lys Ser Lys Ala Lys Val Arg Leu 395 Ser Val Leu Glu Arg Leu Lys Asp Gln Ala Asp Gly Lys Tyr Val Leu 410 Val Ala Gly Ile Thr Pro Thr Pro Leu Gly Glu Gly Lys Ser Thr Val 425 Thr Ile Gly Leu Val Gln Ala Leu Thr Ala His Leu Asn Val Asn Ser Phe Ala Cys Leu Arg Gln Pro Ser Gln Gly Pro Thr Phe Gly Val Lys Gly Gly Ala Ala Gly Gly Gly Tyr Ala Gln Val Ile Pro Met Glu Glu 470 Phe Asn Leu His Leu Thr Gly Asp Ile His Ala Ile Thr Ala Ala Asn 490 Asn Leu Leu Ala Ala Ala Ile Asp Thr Arg Ile Leu His Glu Asn Thr 505 Gln Thr Asp Lys Ala Leu Tyr Asn Arg Leu Val Pro Leu Val Asn Glv

(7/10)

Val Arg Glu Phe Ser Glu Ile Gln Leu Ala Arg Leu Lys Lys Leu Gly 530 540

Ile Asn Lys Thr Asp Pro Ser Thr Leu Thr Glu Glu Glu Val Ser Lys 545 555 560

Phe Ala Arg Leu Asp Ile Asp Pro Ser Thr Ile Thr Trp Gln Arg Val 565 570 575

Leu Asp Thr Asn Asp Arg Phe Leu Arg Lys Ile Thr Ile Gly Gln Gly 580 585 590

Asn Thr Glu Lys Gly His Tyr Arg Gln Ala Gln Phe Asp Ile Ala Val595 600 605

Ala Ser Glu Ile Met Ala Val Leu Ala Leu Thr Asp Ser Leu Ala Asp 610 615

Met Lys Ala Arg Leu Gly Arg Met Val Val Ala Ser Asp Lys Ser Gly 625 630 635

Gln Pro Val Thr Ala Asp Asp Leu Gly Val Thr Gly Ala Leu Thr Val 645 650 655

Leu Met Lys Asp Ala Ile Lys Pro Asn Leu Met Gln Thr Leu Glu Gly 660 665 670

Thr Pro Val Phe Val His Ala Gly Pro Phe Ala Asn Ile Ala His Gly 675 680 685

Asn Ser Ser Val Leu Ala Asp Lys Ile Ala Leu Lys Leu Val Gly Glu 690 695 700

Glu Gly Phe Val Val Thr Glu Ala Gly Phe Gly Ala Asp Ile Gly Met 705 710 715 715 Asp Ile Gly Met 705 720

Glu Lys Phe Phe Asn Ile Lys Cys Arg Ala Ser Gly Leu Val Pro Asn $725 \hspace{1cm} 730 \hspace{1cm} 735$

Val Val Leu Val Ala Thr Val Arg Ala Leu Lys Met His Gly Gly 740 745 750

Gly Pro Ser Val Thr Ala Gly Val Pro Leu Lys Lys Glu Tyr Thr Glu (8/10)

Glu Asn Ile Gln Leu Val Ala Asp Gly Cys Cys Asn Leu Gln Lys Gln 770 775 780

Ile Gln Ile Thr Gln Leu Phe Gly Val Pro Val Val Val Ala Leu Asn 785 790 795 800

Val Phe Lys Thr Asp Thr Arg Ala Glu Ile Asp Leu Val Cys Glu Leu 805 810 815

Ala Lys Arg Ala Gly Ala Phe Asp Ala Val Pro Cys Tyr His Trp Ser 820 825 830

Val Gly Gly Lys Gly Ser Val Asp Leu Ala Arg Ala Val Arg Glu Ala 835 840 845

Ala Ser Lys Arg Ser Arg Phe Gln Phe Leu Tyr Asp Val Gln Val Pro 850 855 860

Ile Val Asp Lys Ile Arg Thr Ile Ala Gln Ala Val Tyr Gly Ala Lys 865 870 875 880

Asp Ile Glu Leu Ser Pro Glu Ala Gln Ala Lys Ile Asp Arg Tyr Thr 885 890 895

Gln Gln Gly Phe Gly Asn Leu Pro Ile Cys Met Ala Lys Thr His Leu 900 905 910

Ser Leu Ser His Gln Pro Asp Lys Lys Gly Val Pro Arg Asp Phe Ile 915 920 925

Leu Pro Ile Ser Asp Val Arg Ala Ser Ile Gly Ala Gly Phe Ile Tyr 930 935 940

Pro Leu Val Gly Thr Met Ser Thr Met Pro Gly Leu Pro Thr Arg Pro 945 950 950 955 960

Cys Phe Tyr Asp Ile Asp Leu Asp Thr Glu Thr Glu Gln Val Lys Gly 965 970 975

Leu Phe

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cccggacgtc actgataggt aag
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